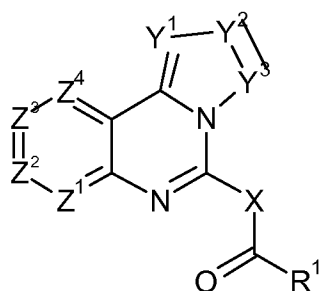


IN THE CLAIMS:

The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Original) A fused azolepyrimidine derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof:



wherein

X represents CR⁵R⁶ or NH;

Y¹ represents CR³ or N;

Chemical bond between Y²—Y³ represents a single bond or double bond,
with the proviso that when the Y²—Y³ represents a double bond,
Y² and Y³ independently represent CR⁴ or N, and
when Y²—Y³ represents a single bond, Y² and Y³ independently represent CR³R⁴
or NR⁴;

Z¹, Z², Z³ and Z⁴ independently represent CH, CR² or N;

R¹ represents aryl optionally having 1 to 3 substituents selected from R¹¹,
C₃₋₈ cycloalkyl optionally having 1 to 3 substituents selected from R¹¹,

C₁₋₆ alkyl optionally substituted by aryl, heteroaryl, C₁₋₆ alkoxyaryl, aryloxy, heteroaryloxy or one or more halogen,
C₁₋₆ alkoxy optionally substituted by carboxy, aryl, heteroaryl, C₁₋₆ alkoxyaryl, aryloxy, heteroaryloxy or one or more halogen,
or
a 3 to 15 membered mono- or bi-cyclic heterocyclic ring that is saturated or unsaturated, optionally having 1 to 3 substituents selected from R¹¹, and contains 1 to 3 heteroatoms selected from the group consisting of N, O and S,

wherein

R¹¹ represents

halogen, nitro, hydroxy, cyano, carboxy, amino, N-(C₁₋₆alkyl)amino, N-(hydroxyC₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(C₁₋₆acyl)amino, N-(formyl)-N-(C₁₋₆alkyl)amino, N-(C₁₋₆alkanesulfonyl) amino, N-(carboxyC₁₋₆alkyl)-N-(C₁₋₆alkyl)amino, N-(C₁₋₆alkoxycarbonyl)amino, N-[N,N-di(C₁₋₆alkyl)amino methylene]amino, N-[N,N-di(C₁₋₆alkyl)amino (C₁₋₆alkyl)methylene]amino, N-[N,N-di(C₁₋₆alkyl)amino C₂₋₆alkenyl]amino, aminocarbonyl, N-(C₁₋₆alkyl)aminocarbonyl, N,N-di(C₁₋₆alkyl)aminocarbonyl, C₃₋₈cycloalkyl, C₁₋₆ alkylthio, C₁₋₆alkanesulfonyl, sulfamoyl, C₁₋₆alkoxycarbonyl,

N-arylamino wherein said aryl moiety is optionally having 1 to 3 substituents selected from R¹⁰¹, N-(aryl C₁₋₆alkyl)amino wherein said aryl moiety is optionally having 1 to 3 substituents selected from R¹⁰¹, aryl C₁₋₆alkoxycarbonyl wherein said aryl moiety is optionally having 1 to 3 substituents selected from R¹⁰¹,

C₁₋₆alkyl optionally substituted by mono-, di- or tri- halogen, amino, N-(C₁₋₆alkyl)amino or N,N-di(C₁₋₆alkyl)amino,

C₁₋₆alkoxy optionally substituted by mono-, di- or tri- halogen,

N-(C₁₋₆alkyl)sulfonamide, or N-(aryl)sulfonamide,

or

a 5 to 7 membered saturated or unsaturated ring having 1 to 3 heteroatoms selected from the group consisting of O, S and N, and optionally having 1 to 3 substituents selected from R¹⁰¹

wherein

R¹⁰¹ represents halogen, carboxy, amino, N-(C₁₋₆ alkyl)amino,

N,N-di(C₁₋₆alkyl)amino, aminocarbonyl, N-(C₁₋₆alkyl)aminocarbonyl,

N,N-di(C₁₋₆alkyl)aminocarbonyl, pyridyl,

C₁₋₆ alkyl optionally substituted by cyano or mono- di- or tri- halogen,
and

C₁₋₆alkoxy optionally substituted by cyano, carboxy, amino, N-(C₁₋₆ alkyl)amino, N,N-di(C₁₋₆alkyl)amino, aminocarbonyl, N-(C₁₋₆alkyl)aminocarbonyl, N,N-di(C₁₋₆alkyl)aminocarbonyl or mono-, di- or tri- halogen;

R² represents hydroxy, halogen, nitro, cyano, amino, N-(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(hydroxyC₁₋₆alkyl)amino, N-(hydroxyC₁₋₆alkyl)-N-(C₁₋₆alkyl)amino, C₁₋₆ acyloxy, aminoC₁₋₆ acyloxy, C₂₋₆alkenyl, aryl,

a 5-7 membered saturated or unsaturated heterocyclic ring having 1 to 3 heteroatoms selected from the group consisting O, S and N, and optionally substituted by

hydroxy, C₁₋₆ alkyl, C₁₋₆ alkoxy, oxo, amino, amino C₁₋₆alkyl, N-(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(C₁₋₆ acyl)amino, N-(C₁₋₆alkyl)carbonylamino, phenyl,

phenyl C₁₋₆ alkyl, carboxy, C₁₋₆alkoxycarbonyl, aminocarbonyl,
N-(C₁₋₆alkyl)aminocarbonyl, or N,N-di(C₁₋₆alkyl)amino, -C(O)- R²⁰

wherein

R²⁰ represents C₁₋₆ alkyl, C₁₋₆ alkoxy, amino, N-(C₁₋₆alkyl)amino,
N,N-di(C₁₋₆alkyl)amino, N-(C₁₋₆ acyl)amino, or a 5-7 membered saturated
or unsaturated heterocyclic ring having 1 to 3 heteroatoms selected from
the group consisting O, S and N, and optionally substituted by C₁₋₆ alkyl,
C₁₋₆ alkoxy, oxo, amino, N-(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino,
N-(C₁₋₆ acyl)amino, phenyl, or benzyl,

C₁₋₆ alkyl optionally substituted by R²¹,

or

C₁₋₆ alkoxy optionally substituted by R²¹,

wherein

R²¹ represents cyano, mono-, di or tri- halogen, hydroxy, amino, N-
(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N- (hydroxyC₁₋₆ alkyl)
amino, N- (halophenylC₁₋₆ alkyl) amino, amino C₂₋₆ alkylenyl, C₁₋₆
alkoxy, hydroxyC₁₋₆ alkoxy, -C(O)- R²⁰¹, -NHC(O)- R²⁰¹,
C₃₋₈cycloalkyl, isoindolino, phthalimidyl, 2-oxo-1,3-oxazolidinyl,
aryl or a 5 or 6 membered saturated or unsaturated heterocyclic ring
having 1 to 4 heteroatoms selected from the group consisting O, S
and N, and optionally substituted by hydroxy, C₁₋₆ alkyl, C₁₋₆
alkoxy, C₁₋₆ alkoxycarbonyl, hydroxyC₁₋₆ alkoxy, oxo, amino,
aminoC₁₋₆alkyl, N-(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N-
(C₁₋₆ acyl)amino, or benzyl,

wherein

R²⁰¹ represents hydroxy, amino, N-(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N- (halophenylC₁₋₆ alkyl) amino, C₁₋₆alkyl, aminoC₁₋₆ alkyl, aminoC₂₋₆ alkylenyl, C₁₋₆alkoxy, a 5 or 6 membered saturated or unsaturated heterocyclic ring having 1 to 4 heteroatoms selected from the group consisting O, S and N, and optionally substituted by hydroxy, C₁₋₆ alkyl, C₁₋₆ alkoxy, C₁₋₆ alkoxycarbonyl, hydroxyC₁₋₆ alkoxy, oxo, amino, N-(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(C₁₋₆ acyl)amino or benzyl;

R³ represents hydrogen, halogen, aminocarbonyl, or C₁₋₆ alkyl optionally substituted by aryl C₁₋₆ alkoxy or mono-, di- or tri- halogen;

R⁴ represents hydrogen or C₁₋₆ alkyl;

R⁵ represents hydrogen or C₁₋₆ alkyl; and

R⁶ represents halogen, hydrogen or C₁₋₆ alkyl.

2. (Cancelled)

3. (Original) The fused azolepyrimidine derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1,

wherein

X represents CR⁵R⁶ or NH;

Y¹ represents N;

Y² and Y³ represent CR³R⁴;

Chemical bond between $Y^2 \text{---} Y^3$ represents a single bond.

Z^4 represents CH;

Z^1 , Z^2 and Z^3 independently represent CH, CR^2 or N;

R^1 represents

C_{1-6} alkyl optionally substituted by mono-, di- or tri- halogen, phenyl, methoxyphenyl, phenoxy, or thienyl,

C_{1-6} alkoxy optionally substituted by phenyl phenoxy, thienyl or mono-, di- or tri-halogen,

or

one of the following carbocyclic and heterocyclic rings selected from the group consisting of cyclopropyl, cyclopentyl, cyclohexyl, piperidiny, piperaziny, pyrroly, pyrazoly, furyl, thienyl, thiazoly, isothiazoly, oxazoly, isoxazoly, imidazoly, isoimidazoly, pyrazoly, 1,2,3-thiadiazoly, 1,2,4-thiadiazoly, 1,2,5-thiadiazoly, 1,3,4-thiadiazoly, 1,2,3-oxadiazoly, 1,2,4-oxadiazoly, 1,2,5-oxadiazoly, 1,3,4-oxadiazoly, 1,2,3-triazoly, 1,2,4-triazoly, 1,2,5-triazoly, 1,3,4-triazoly, phenyl, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, 1-benzothiophenyl, benzothiazoly, benzimidazoly, 3H-imidazo[4,5-b]pyridinyl, benzotriazoly, indolyl, indazolyl, imidazo[1,2-a]pyridinyl, quinolinyl, and 1,8-naphthyridinyl,

wherein

said carbocyclic and heterocyclic rings optionally substituted with 1 to 3 substituents selected from the group consisting of hydroxy, halogen, nitro, cyano, carboxy, amino, N-(C_{1-6} alkyl)amino, N-(hydroxy C_{1-6} alkyl)amino, N,N-

di(C₁₋₆alkyl)amino, N-(C₁₋₆acyl)amino, N-(C₁₋₆alkoxycarbonyl)amino, N-(formyl)-N-(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl) amino (C₂₋₆alkenyl) amino, N-(C₁₋₆alkane)sulfonyl amino, N[N,N-di(C₁₋₆alkyl)amino methylene]amino, C₁₋₆ alkylthio, C₁₋₆alkanesulfonyl, sulfamoyl, C₁₋₆alkoxy, C₁₋₆alkoxycarbonyl, pyrrolyl, imidazolyl, pyrazolyl, pyrrolidinyl, pyridyl, phenyl C₁₋₆alkoxycarbonyl, thiazolyl optionally substituted by pyridyl, piperazinyl optionally substituted by C₁₋₆ alkyl or C₁₋₆alkoxy and C₁₋₆alkyl optionally substituted by mono-, di- or tri-halogen;

R² represents halogen, hydroxy, nitro, cyano, amino, N-(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(hydroxyC₁₋₆alkyl)-N-(C₁₋₆alkyl)amino, (C₂₋₆)alkenyl, C₁₋₆alkoxycarbonyl, aminocarbonyl, furyl, piperidino, morpholino, phenyl, pyrrolidinyl optionally substituted by N-(C₁₋₆ acyl)amino, or N-(C₁₋₆.alkyl)carbonylamino, piperidino optionally substituted by hydroxy, piperazinyl optionally substituted by C₁₋₆alkyl, phenylC₁₋₆alkyl, C₁₋₆alkoxycarbonyl, or aminocarbonyl;

C₁₋₆ alkyl optionally substituted by amino, cyano, C₁₋₆alkoxycarbonyl, morpholino, or mono-, di- or tri- halogen,

or

C₁₋₆ alkoxy optionally substituted by hydroxy, cyano, carboxy, C₁₋₆ alkoxy, C₁₋₆ acyl, C₁₋₆alkoxycarbonyl, amino, N-(C₁₋₆alkyl)amino, N-(C₁₋₆.alkyl)aminocarbonyl, N,N-di(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)aminocarbonyl, aminocarbonyl, aminoC₁₋₆ alkylcarbonyl, N-(halobenzyl)aminocarbonyl, hydroxy C₁₋₆ alkoxy, C₃₋₆ cycloalkyl, morpholino, morpholinocarbonyl, pyrrolidinyl, pyrrolyl, piperidino, phthalimidyl,

or

piperazinyl optionally substituted by benzyl;

R^3 represents hydrogen;

R^4 represents hydrogen;

R^5 represents hydrogen; and

R^6 represents hydrogen.

4. (Original) The fused azolepyrimidine derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1,

wherein

X represents CR^5R^6 or NH;

Y^1 represents N;

Y^2 and Y^3 represent CR^3R^4 ;

Chemical bond between $Y^2 \text{---} Y^3$ represents a single bond

Z^4 represents CH;

Z^1 , Z^2 and Z^3 independently represent N, CH or CR^2 ;

R^1 represents cyclopropyl, cyclopentyl, cyclohexyl, 2-furyl, 3-furyl, imidazolyl, pyrimidinyl, pyridazinyl, piperazinyl, 1,2,3-thiadiazolyl, 1,3-benzothiazolyl, quinolyl, 3H-imidazo[4,5-b]pyridinyl,

1H-pyrrol-2-yl optionally substituted by C₁₋₆alkyl,
1H-pyrrol-3-yl optionally substituted by C₁₋₆alkyl,
pyrazolyl optionally substituted by 1 or 2 C₁₋₆alkyl,
isoxazolyl optionally substituted by 1 or 2 C₁₋₆alkyl,
2-thienyl optionally substituted by chloro, nitro, cyano, or C₁₋₆ alkyl,
3-thienyl optionally substituted by chloro, nitro, cyano, or C₁₋₆ alkyl,
piperidinyl optionally substituted by C₁₋₆alkoxycarbonyl, or benzyloxycarbonyl,
phenyl optionally substituted by 1 to 3 substituents selected from the group
consisting of fluoro, chloro, hydroxy, nitro, cyano, carboxy, C₁₋₆ alkyl, C₁₋₆alkoxy,
C₁₋₆alkoxycarbonyl, amino, N-(C₁₋₆alkyl)amino, N-(C₁₋₆acyl)amino,
N-(C₁₋₆alkoxycarbonyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(formyl)-N-
C₁₋₆alkylamino, C₁₋₆ alkylthio, C₁₋₆alkanesulfonyl, sulfamoyl, pyrrolyl,
imidazolyl, pyrazolyl, and piperazinyl optionally substituted by C₁₋₆alkyl,

pyridyl optionally substituted by 1 or 2 substituents selected from the group
consisting of chloro, hydroxy, carboxy, C₁₋₆alkoxy, C₁₋₆alkylthio, amino,
N-(C₁₋₆alkyl)amino, N-(hydroxyC₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino,
N-(C₁₋₆acyl)amino, N-(C₁₋₆alkane)sulfonyl amino, N[N,N-di(C₁₋₆alkyl)amino
methylene]amino, and C₁₋₆alkyl optionally substituted by tri halogen,

pyrazinyl optionally substituted by C₁₋₆alkyl, 1,3-thiazolyl optionally substituted
by 1 or 2 substituents selected from the group consisting of C₁₋₆alkyl, pyridyl and
N-(C₁₋₆alkoxycarbonyl)amino, indolyl optionally substituted by C₁₋₆alkyl,

benzimidazolyl optionally substituted by C₁₋₆alkyl or tri-halo C₁₋₆alkyl,

1,2,3-benzotriazolyl optionally substituted by C₁₋₆alkyl,

1,8-naphthyridinyl optionally substituted by C₁₋₆alkyl optionally substituted by tri halogen,

C₁₋₆ alkyl optionally substituted by tri- halogen, phenyl, phenoxy, or thienyl,

or

C₁₋₆alkoxy optionally substituted by phenyl, phenoxy, or thienyl;

R² represents fluoro, chloro, bromo, hydroxy, nitro, vinyl, cyano, amino, aminoacetoxy, N-(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(hydroxyC₁₋₆alkyl)-N-(C₁₋₆alkyl)amino, 2-furyl, piperidino, morpholino, phenyl, pyrrolidinyl optionally substituted by acetamido, piperidino optionally substituted by hydroxy, piperazinyl optionally substituted by methyl, benzyl, C₁₋₆ alkoxy carbonyl, or aminocarbonyl,

C₁₋₆ alkyl optionally substituted by cyano, tri-fluoro, carboxy, methoxycarbonyl, aminocarbonyl, tert-butoxycarbonyl, tetrahydropyranyl, or morpholino,

C₁₋₆ alkoxy optionally substituted by hydroxy, cyano, methoxy, methoxycarbonyl, tert-butoxycarbonyl, carboxy, aminoacetyl, dimethylamino, aminocarbonyl, methylaminocarbonyl, dimethylaminocarbonyl, isopropylaminocarbonyl, fluorobenzylaminocarbonyl, cyclopropyl, pyrrolidinyl, piperidino, tetrahydropyranyl, morpholino, morpholinocarbonyl, 2-oxo-1,3-oxazolidin-4-yl, phthalimid-N-yl, or hydroxy C₁₋₆ alkyleneoxy,

R³ represents hydrogen;

R⁴ represents hydrogen;

R^5 represents hydrogen; and

R^6 represents hydrogen.

5. (Original) The fused azolepyrimidine derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1,

wherein

X represents CR^5R^6 or NH;

Y^1 represents N;

Y^2 and Y^3 represent CR^3R^4 ;

Chemical bond between $Y^2 \text{---} Y^3$ represents a single bond;

Z^3 and Z^4 represent CH;

Z^1 and Z^2 independently represent CH or CR^2 ;

R^1 represents cyclopropyl, cyclopentyl, cyclohexyl, 2-furyl, 3-furyl, imidazolyl, 1H-pyrrol-2-yl, 1H-pyrrol-3-yl, pyrimidinyl, pyridazinyl, piperazinyl, 1,2,3-thiadiazolyl, 1,3-benzothiazolyl, quinolyl, 3H-imidazo[4,5-b]pyridinyl,

pyrrolyl optionally substituted by C_{1-6} alkyl, pyrazolyl optionally substituted by 1 or 2 C_{1-6} alkyl, isoxazolyl optionally substituted by 1 or 2 C_{1-6} alkyl,

2-thienyl optionally substituted by chloro, nitro, cyano, or C₁₋₆ alkyl, 3-thienyl optionally substituted by chloro, nitro, cyano, or C₁₋₆ alkyl,

piperidinyl optionally substituted by C₁₋₆alkoxycarbonyl, or benzyloxycarbonyl,

phenyl optionally substituted by 1 to 3 substituents selected from the group consisting of fluoro, chloro, hydroxy, nitro, cyano, carboxy, C₁₋₆ alkyl, C₁₋₆alkoxy, C₁₋₆alkoxycarbonyl, amino, N-(C₁₋₆alkyl)amino, N-(C₁₋₆acyl)amino, N-(C₁₋₆alkoxycarbonyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(formyl)-N-C₁₋₆alkylamino, C₁₋₆ alkylthio, C₁₋₆alkanesulfonyl, sulfamoyl, pyrrolyl, imidazolyl, pyrazolyl, and piperazinyl optionally substituted by C₁₋₆alkyl,

pyridyl optionally substituted by 1 or 2 substituents selected from the group consisting of chloro, hydroxy, carboxy, C₁₋₆alkoxy, C₁₋₆alkylthio, amino, N-(C₁₋₆alkyl)amino, N-(hydroxyC₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(C₁₋₆acyl)amino, N-(C₁₋₆alkane)sulfonyl amino, N[N,N-di(C₁₋₆alkyl)amino methylene]amino, and C₁₋₆alkyl optionally substituted by tri halogen,

pyrazinyl optionally substituted by C₁₋₆alkyl, 1,3-thiazolyl optionally substituted by

1 or 2 substituents selected from the group consisting of C₁₋₆alkyl, pyridyl and N-(C₁₋₆alkoxycarbonyl)amino, indolyl optionally substituted by C₁₋₆alkyl, benzimidazolyl optionally substituted by C₁₋₆alkyl or tri-halo C₁₋₆alkyl,

1,2,3-benzotriazolyl optionally substituted by C₁₋₆alkyl, 1,8-naphthyridinyl optionally substituted by C₁₋₆alkyl optionally substituted by tri halogen,

C₁₋₆ alkyl optionally substituted by tri- halogen, phenyl, phenoxy, or thienyl,

or

C₁₋₆alkoxy substituted by phenyl, phenoxy, or thienyl;

R² represents fluoro, chloro, bromo, hydroxy, nitro, vinyl, cyano, amino, aminoacetoxy, N-(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(hydroxyC₁₋₆alkyl)-N-(C₁₋₆alkyl)amino, 2-furyl, piperidino, morpholino, phenyl,

pyrrolidinyl optionally substituted by acetamido,

piperidino optionally substituted by hydroxy,

piperazinyl optionally substituted by methyl, benzyl, C₁₋₆alkoxycarbonyl, or aminocarbonyl,

C₁₋₆ alkyl optionally substituted by cyano tri-fluoro, carboxy, methoxycarbonyl, aminocarbonyl, tert-butoxycarbonyl, tetrahydropyranyl, or morpholino,

or

C₁₋₆ alkoxy optionally substituted by hydroxy, cyano, methoxy, methoxycarbonyl, tert-butoxycarbonyl, carboxy, aminoacetyl, dimethylamino, aminocarbonyl, methylaminocarbonyl, dimethylaminocarbonyl, isopropylaminocarbonyl, fluorobenzylaminocarbonyl, cyclopropyl, pyrrolidinyl, piperidino, tetrahydropyranyl, morpholino, morpholinocarbonyl, 2-oxo-1,3-oxazolidin-4-yl, phthalimid-N-yl, or hydroxy C₁₋₆ alkyleneoxy;

R³ represents hydrogen;

R⁴ represents hydrogen;

R^5 represents hydrogen; and

R^6 represents hydrogen.

6. (Original) The fused azolepyrimidine derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1,

wherein

X represents CR^5R^6 or NH;

Y^1 represents N;

Y^2 and Y^3 represent CR^3R^4 ;

Chemical bond between $Y^2 \text{---} Y^3$ represents a single bond;

Z^1 and Z^4 represent CH;

Z^2 and Z^3 independently represent CH or CR^2 ;

R^1 represents cyclopropyl, cyclopentyl, cyclohexyl, 2-furyl, 3-furyl, imidazolyl, 1H-pyrrol-2-yl, 1H-pyrrol-3-yl, pyrimidinyl, piperazinyl, pyridazinyl, 1,2,3-thiadiazolyl, 1,3-benzothiazolyl, quinolyl, 3H-imidazo[4,5-b]pyridinyl,

pyrrolyl optionally substituted by C_{1-6} alkyl,

pyrazolyl optionally substituted by 1 or 2 C_{1-6} alkyl,

isoxazolyl optionally substituted by 1 or 2 C₁₋₆alkyl,

2-thienyl optionally substituted by chloro, nitro, cyano, or C₁₋₆ alkyl,

3-thienyl optionally substituted by chloro, nitro, cyano, or C₁₋₆ alkyl,

piperidinyl optionally substituted by C₁₋₆alkoxycarbonyl, or benzyloxycarbonyl,

phenyl optionally substituted by 1 to 3 substituents selected from the group consisting of fluoro, chloro, hydroxy, nitro, cyano, carboxy, C₁₋₆ alkyl, C₁₋₆alkoxy, C₁₋₆alkoxycarbonyl, amino, N-(C₁₋₆alkyl)amino, N-(C₁₋₆acyl)amino, N-(C₁₋₆alkoxycarbonyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(formyl)-N-C₁₋₆alkyl-amino, C₁₋₆ alkylthio, C₁₋₆alkanesulfonyl, sulfamoyl, pyrrolyl, imidazolyl, pyrazolyl, and piperazinyl optionally substituted by C₁₋₆alkyl,

pyridyl optionally substituted by 1 or 2 substituents selected from the group consisting of chloro, hydroxy, carboxy, C₁₋₆alkoxy, C₁₋₆alkylthio, amino, N-(C₁₋₆alkyl)amino, N-(hydroxyc₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(C₁₋₆acyl)amino, N-(C₁₋₆alkane)sulfonyl amino, N[N,N-di(C₁₋₆alkyl)amino-methylene]amino, C₁₋₆alkoxyphenylC₁₋₆alkoxy, and C₁₋₆alkyl optionally substituted by tri halogen,

pyrazinyl optionally substituted by C₁₋₆alkyl,

1,3-thiazolyl optionally substituted by 1 or 2 substituents selected from the group consisting of C₁₋₆alkyl, pyridyl and N-(C₁₋₆alkoxycarbonyl)amino, indolyl optionally substituted by C₁₋₆alkyl, benzimidazolyl optionally substituted by C₁₋₆alkyl or tri-halo C₁₋₆alkyl,

1,2,3-benzotriazolyl optionally substituted by C₁₋₆alkyl, 1,8-naphthyridinyl optionally substituted by C₁₋₆alkyl optionally substituted by tri halogen,

C₁₋₆ alkyl optionally substituted by tri- halogen, phenyl, phenoxy, or thienyl,

or

C₁₋₆alkoxy substituted by phenyl, phenoxy, or thienyl;

R² represents fluoro, chloro, bromo, hydroxy, nitro, vinyl, cyano, amino, aminoacetoxyl, N-(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(hydroxyc₁₋₆alkyl)-N-(C₁₋₆alkyl)amino, 2-furyl, piperidino, morpholino, phenyl,

pyrrolidinyl optionally substituted by acetamido, piperidino optionally substituted by hydroxy, piperazinyl optionally substituted by methyl, benzyl, C₁₋₆alkoxycarbonyl, or aminocarbonyl,

C₁₋₆ alkyl optionally substituted by cyano, tri-fluoro, carboxy, methoxycarbonyl, aminocarbonyl, tert-butoxycarbonyl, tetrahydropyranyl, or morpholino,

or

C₁₋₆ alkoxy optionally substituted by hydroxy, cyano, methoxy, methoxycarbonyl, tert-butoxycarbonyl, carboxy, aminoacetyl, dimethylamino, aminocarbonyl, methylaminocarbonyl, dimethylaminocarbonyl, isopropylaminocarbonyl, fluorobenzylaminocarbonyl, cyclopropyl, pyrrolidinyl, piperidino, tetrahydropyranyl, morpholino, morpholinocarbonyl, tetrazolyl, 2-oxo-1,3-oxazolidin-4yl, phthalimid-N-yl, or hydroxy C₁₋₆ alkyleneoxy;

R^3 represents hydrogen;

R^4 represents hydrogen;

R^5 represents hydrogen; and

R^6 represents hydrogen.

7. (Original) The fused azolepyrimidine derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1,

X represents CR^5R^6 or NH;

Y^1 represents N;

Y^2 and Y^3 represent CR^3R^4 ;

Chemical bond between $Y^2 \text{---} Y^3$ represents a single bond;

Z^3 and Z^4 represent CH;

Z^1 and Z^2 independently represent CH or CR^2 ;

R^1 represents 3H-imidazo[4,5-b]pyridinyl, benzimidazolyl

pyridyl optionally substituted by hydroxy, amino, acetamido, methoxybenzyloxy or methylsulfonylamino,

or

1,3-thiazolyl optionally substituted by 1 or 2 methyl;

R^2 represents fluoro, chloro, bromo, morpholino, piperazinyl, methylpiperazinyl, methyl, tri-fluoro methyl, or C_{1-6} alkoxy optionally substituted by hydroxy, cyano, carboxy, dimethylaminocarbonyl, tetrahydropyranyl, morpholino, morpholinocarbonyl, tetrazolyl, or phthalimid-N-yl;

R^3 represents hydrogen;

R^4 represents hydrogen;

R^5 represents hydrogen; and

R^6 represents hydrogen.

8. (Original) The fused azolepyrimidine derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1,

X represents CR^5R^6 or NH;

Y^1 represents N;

Y^2 and Y^3 represent CR^3R^4 ;

Chemical bond between $Y^2 \text{---} Y^3$ represents a single bond;

Z^1 , Z^3 and Z^4 represent CH;

Z^2 represents CR^2 ;

R^1 represents 3H-imidazo[4,5-b]pyridinyl, benzimidazolyl
pyridyl optionally substituted by hydroxy, amino, acetamido, methoxybenzyloxy
or methylsulfonylamino,

or

1,3-thiazolyl optionally substituted by 1 or 2 methyl,

R^2 represents fluoro, chloro, bromo, morpholino, piperazinyl, methylpiperazinyl,
methyl, tri-fluoro methyl, C_{1-6} alkoxy optionally substituted by hydroxy, cyano,
carboxy, dimethylaminocarbonyl, tetrahydropyranyl, morpholino,
morpholinocarbonyl, tetrazolyl, or phthalimid-N-yl;

R^3 represents hydrogen;

R^4 represents hydrogen;

R^5 represents hydrogen; and

R^6 represents hydrogen.

9. (Original) The fused azolepyrimidine derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1, wherein said derivative is selected from the group consisting of the following compounds:

N-(7,8-dimethoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)nicotinamide;

2-(7,8-dimethoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-1-pyridin-3-ylethylenol;

N-(7,8-dimethoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-1H-benzimidazole-5-carboxamide;

6-(acetamido)-N-(7,8-dimethoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)nicotinamide;

N-{5-[2-(7,8-dimethoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-1-hydroxyvinyl]pyridin-2-yl}acetamide;

2-({5-[2-hydroxy-2-pyridin-3-ylvinyl]-7-methoxy-2,3-dihydroimidazo[1,2-c]quinazolin-8-yl}oxy)-N,N-dimethylacetamide;

2-[7-methoxy-8-(tetrahydro-2H-pyran-2-ylmethoxy)-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl]-1-pyridin-3-ylethylenol;

2-[8-(2-hydroxyethoxy)-7-methoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl]-1-pyridin-3-ylethylenol;

({5-[2-hydroxy-2-pyridin-3-ylvinyl]-7-methoxy-2,3-dihydroimidazo[1,2-c]quinazolin-8-yl}oxy)acetic acid;

4-({5-[2-hydroxy-2-pyridin-3-ylvinyl]-7-methoxy-2,3-dihydroimidazo[1,2-c]quinazolin-8-yl}oxy)butanoic acid;

({5-[2-hydroxy-2-pyridin-3-ylvinyl]-7-methoxy-2,3-dihydroimidazo[1,2-c]quinazolin-8-yl}oxy)acetonitrile;

2-[7-methoxy-8-(2H-tetrazol-5-ylmethoxy)-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl]-1-pyridin-3-ylethylenol;

2-[7-methoxy-8-(4-morpholin-4-yl-4-oxobutoxy)-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl]-1-pyridin-3-ylethylenol;

5-[1-hydroxy-2-(8-morpholin-4-yl-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)vinyl]pyridin-3-ol ;

N-(2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-5-hydroxynicotinamide;

6-(acetamido)-N-(7,9-dimethoxy-8-methyl-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)nicotinamide;

N-(8,9-dimethoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-5-hydroxynicotinamide;

5-hydroxy-N-(7-methoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)nicotinamide;

N-(7,8-dimethoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-5-[(4-methoxybenzyl)oxy]nicotinamide;

N-(7,8-dimethoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-5-hydroxynicotinamide;

5-hydroxy-N-[8-(trifluoromethyl)-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl]nicotinamide;

N-{8-[3-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)propoxy]-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl}nicotinamide;

N-(7-bromo-8-methoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)nicotinamide;

6-amino-N-(8-methoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)nicotinamide;

1-(1H-benzimidazol-5-yl)-2-(8,9-dimethoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)ethylenol;

2-(8,9-dimethoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-1-(2,4-dimethyl-1,3-thiazol-5-yl)ethylenol;

N-(9-methoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-1H-benzimidazole-5-carboxamide;

N-(8-bromo-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)nicotinamide;

N-(8-bromo-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-1H-benzimidazole-5-carboxamide;

N-(8-methoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-1H-benzimidazole-5-carboxamide;

N-(8-methyl-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-1H-benzimidazole-5-carboxamide;

N-[8-(trifluoromethyl)-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl]-1H-benzimidazole-5-carboxamide;

N-(7-fluoro-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-1H-benzimidazole-5-carboxamide;

N-(7-methoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)nicotinamide;

N-(8-chloro-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-1H-benzimidazole-5-carboxamide;

6-(acetamido)-N-(8-morpholin-4-yl-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)nicotinamide;

1-(1H-benzimidazol-5-yl)-2-(8-morpholin-4-yl-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)ethylenol;

N-{5-[1-hydroxy-2-(8-morpholin-4-yl-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)vinyl]pyridin-2-yl}acetamide;

6-methyl-N-(8-morpholin-4-yl-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)nicotinamide;

1-(1H-benzimidazol-5-yl)-2-[8-(4-methylpiperazin-1-yl)-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl]ethylenol;

N-(2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-3H-imidazo[4,5-b]pyridine-6-carboxamide;

N-(7,8-dimethoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-3H-imidazo[4,5-b]pyridine-6-carboxamide;

N-[7-(trifluoromethyl)-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl]-1H-benzimidazole-5-carboxamide;

N-(7,9-dimethoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-1H-benzimidazole-5-carboxamide;

N-{5-[2-(7,9-dimethoxy-8-methyl-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-1-hydroxyvinyl]pyridin-2-yl}acetamide;

N-{5-[2-(7-bromo-9-methyl-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-1-hydroxyvinyl]pyridin-2-yl}acetamide; and

2-(8,9-dimethoxy-2,3-dihydroimidazo[1,2-c]quinazolin-5-yl)-1-pyridin-3-ylethylenol;

10. (Original) A medicament comprising the fused azolepyrimidine derivative, its tautomeric or stereoisomeric form, or a physiologically acceptable salt thereof as claimed in claim 1 as an active ingredient.

11. (Original) The medicament as claimed in claim 10, further comprising one or more pharmaceutically acceptable excipients.

12. (Original) The medicament as claimed in claim 10, wherein the fused azolepyrimidine derivative, its tautomeric or stereoisomeric form, or a physiologically acceptable salt thereof is a PI3K inhibitor.

13. (Original) The medicament as claimed in claim 10, wherein the fused azolepyrimidine derivative, its tautomeric or stereoisomeric form, or a physiologically acceptable salt thereof is a PI3K- γ inhibitor.

14-26. (Cancelled)